### WILDLIFE MANAGEMENT UNIT - 24 (46) - MT. DUTTON

## **Boundary Description**

**Garfield and Piute Counties** - Boundary begins at the junction of Highways US-89 and SR-62; then south on US-89 to Highway SR-12; then east on SR-12 to the Widtsoe-Antimony Road; then north on this road to Highway SR-22; then north on SR-22 to SR-62; then west on SR-62 to US-89 and beginning point.

### **Herd Unit Description**

The Dutton Unit is located at the southern end of one of several high plateaus in southern Utah that are the result of a long succession of volcanic activity which centered in the Tushar Mountains and extended south and east to create the Kolob, Sevier and Aquarius Plateaus. Table Mountain is an example of a lava capped plateau on the north end of the unit. Non-marine sedimentary rocks form the parent material for the soils at lower elevations on the southern and eastern portions of the unit. Mt. Dutton rises to an elevation of 11,036 feet near the center of the unit. The reader is directed to review the herd unit description given by Huff (1965) for information on the major drainages, municipalities and the limits of normal and severe deer winter range. Huff (1965) identified the vegetation composition of normal and severe deer winter range. The acreages for each type are presented below.

| ACREAGE OF VEGETATION TYPE         |                    |             |  |  |  |
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| Vegetation Type                    | Acres              | %           |  |  |  |
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| Pinyon-Juniper                     | 97,500             | 66          |  |  |  |
| Sagebrush                          | 32,000             | 22          |  |  |  |
| Mixed Types                        | 10,900             | 8           |  |  |  |
| Mountain Brush                     | 0                  | 0           |  |  |  |
| Sagebrush-Rabbitbrush              | 900                | 1           |  |  |  |
| Seedings                           | 1,900              | 1           |  |  |  |
| Agricultural Lands                 | 2,600              | 2           |  |  |  |
|                                    |                    |             |  |  |  |
| TOTAL                              | 145,900            | 100         |  |  |  |

The 1998 deer and elk management plans estimate 131,752 acres of deer and 114,892 acres of elk summer range on the unit. The majority of this range is on land administered by the U. S. Forest Service, 94% and 99% respectively. Winter range is estimated at 159,508 acres for deer and 71,951 for elk. Most of the winter range is on Forest Service lands, 51% and 70% respectively, but some occurs on BLM administered lands (36% and 10%).

## Key Areas

Key winter range areas for deer were identified by the local interagency committee during the spring of 1987 and include the following areas: North Pole Canyon, Deer Creek Bench, North Bull Rush, Mud Springs, Cow Creek, and the Marshall Basin chaining. The elevation of these key areas range from 6,500 to 7,300 feet. Range types included in the monitoring effort are pinyon-juniper (chained and seeded), Wyoming big sagebrush, and black sagebrush.

Key areas for elk during the winter and summer periods were also identified by the local interagency committee and include: Suicide Pasture, Table Mountain, Cow Creek, Mud Spring Ridge, Barnhurst Ridge, and Prospect

Pasture. These sites range in elevation from 7,200 feet for winter range in Cow Creek to 9,600 feet for summer range in Suicide. The range types included in the monitoring effort are mixed alpine, black sagebrush, and mixed mountain brush.

Activities which have greatly influenced the vegetation composition on these key areas are livestock grazing, range seedings, prescribed burning, and logging. Since livestock grazing has impacted every key area, a discussion of the allotment management plans for each area gives important background information for these sites.

## **Livestock Grazing Summary**

### East Pines - C & H Allotment

Prior to 1954, sheep and cattle used the area now included in this allotment. Approximately 5,770 acres were dixie harrowed or plowed and seeded from 1949 to the early 1950's. From 1954-68, the unit was grazed on a deferred rotation system. Since 1968, it has been grazed by cattle only on a three pasture, rest-rotation system involving the Showalter, West Hunt, and East Hunt pastures. The Mud Spring trend study is located in the Showalter pasture. The Allotment Management Plan, prepared in 1965 and updated in 1977 found 23% of the pasture to be in good condition, 70% in fair condition, and 7% in poor condition. About 50% of the pasture which is suitable for livestock grazing was seeded in the early 1950's. The permittee uses this Forest Service allotment 6/1 to 10/10 and then grazes state land adjacent to U.S. Forest Land in Johns Valley in the fall from 10/10-12/1.

#### Hunt Creek

### Cottonwood S & G Allotment

The allotment has been grazed by livestock since the 1860's. Livestock numbers have fluctuated from 50 to 140 cows and from 800-1,750 sheep. In addition, cattle drift in from adjacent areas to increase the level of use in the area. In 1953, the allotment was allocated to sheep only. From 1953-59 the allotment was composed of the West Hunt Creek S & G Allotment and the Prospect Creek - Spring Creek S & G Allotment. Active preference for the two units was 1,148 sheep from 6/15-9/30 each year (803 AUMs). In 1960, these two units were combined to form the Hunt Creek S & G Allotment. Stocking levels were reduced to 595 AUMs for the same period of use. In 1965, the same number of AUMs were authorized for a shorter grazing period (7/1-9/30). In 1981, the allotment was combined with the Cottonwood S & G Allotment. Numbers were changed to 1,200 from 6/16-10/10 (932 AUMs). Prior to this time, 400-450 AUMs had been allocated for sheep use in the Cottonwood Allotment since 1962. The Barnhurst Ridge trend study is located in the West Hunt Pasture which is grazed by 930 cattle as part of a 5 pasture deferred rotation grazing system.

# Widtsoe C & H Allotment

The population in Johns Valley reached a peak population of 1,200 in 1915 as homesteaders attempted to dry farm. Lack of sufficient moisture forced the settlers to move. By 1935, most of the homesteads were purchased by the government through the Resettlement Act and returned to federal ownership. In 1960, an executive order gave sole jurisdiction of 14,825 acres to the BLM and 11,783 acres to the U.S. Forest Service. The Widtsoe Allotment was described as a separate unit and included inside the U.S. Forest Service boundary at that time. The unit was divided into three pastures in 1968 following the treatment of approximately 8,200 acres of sagebrush rangeland. A 1977 updated AMP shows that 88% of the treated area is in good condition, and 12% is only in fair condition. The native range (1,139 acres) is considered to be in fair condition, and 500 acres dominated by rabbitbrush are listed as being in poor condition.

The Prospect trend study is located in the lower Prospect Pasture which is grazed by 337 cattle from June 1st to

October 10<sup>th</sup>, as part of a three pasture deferred rotation system. The number of elk using this allotment has increased over the years during late winter and early spring months.

# Jones Corral C & H Allotment

The Mud Springs and Suicide trend studies are located in the Mud Springs Division of the Jones Corral C & H Allotment. The Mud Springs site was chained and seeded in 1975 (2,418 acres). The Jones Corral Enclosure was also seeded.

The Mud Springs C & H allotment was established in 1969. Prior to 1955, seven permittees grazed 110 cattle season long. The cows drifted to higher elevations and caused overstocking problems in the vicinity of Jones Corral. Prior to the creation of the U.S. Forest Service, the Jones Corral area was grazed by a large number of sheep. It has since been converted to cattle and is the middle unit of a 3-pasture deferred rotation system involving two pastures in the Mud Springs chaining. Currently, the Mud Springs part of the unit is grazed by 208 cattle sometime between June 1<sup>st</sup> to October 10<sup>th</sup> depending on the rotation. Cattle do not get on to the Suicide area until mid-July.

### Deer Creek Sheep Allotment

Three units make up this allotment: Horse Valley, Table Mountain and Deer Creek. The Marshall Basin trend study is located in the Horse Valley Unit, although the chained area has been set aside for wildlife. The Table Mountain study is located in the Table Mountain Unit.

The Horse Valley Unit was grazed with cattle and horses prior to 1922. After 1922, it was switched over to sheep use, and numbers varied from 1,076 prior to 1924 to 900 in 1931 following a 10% reduction. Table Mountain has always been sheep range. Cattle have drifted from the Jones Corral Unit onto Table Mountain, and sheep have drifted into the cattle allotment. For the past few years, sheep have been kept off the Table Mountain area.

### Pine Creek Allotment - BLM

This allotment historically has provided spring and fall range for cattle. For the grazing history of this area and the percent composition of the various condition classes for suitable grazing land, the reader is referred to the BLM Resource Management Plan for the area. Active preference is 691 AUM's on the federal portion and 62 AUM's on the state with spring and fall cattle use.

The North Pole Canyon and Cow Creek trend studies are located on state land adjacent to this allotment.

## Herd Unit Management Objectives

The current management objectives for deer are to achieve a target population size of 2,400 wintering deer with a post season buck to doe ratio of 15:100 and 30% of these bucks being three point or better. The elk management objective is to achieve a target winter population of 900 elk with a minimum post season bull to cow ration of 14:100 and at least 70 of these bulls being 2 ½ years of age or older. The bull elk harvest objective is to provide opportunity for a 60% bull harvest success ratio and 40% of the harvest being 2 ½ year or older bulls. The bull harvest will be managed to average 3 to 4 year old animals.

### Herd Unit Status

The buck deer harvest averaged 201 between 1990 and 1995. This is a major decline from the previous four years (1986 to 1989) which averaged 565 bucks harvested per year. The fawn/doe ratio is currently marginal with 49 fawns/100 does estimated during the 1994-95 and 1995-96 seasons. Since 1991-92, the ratio has averaged only 54 fawns/100 does. Poor fawn production was also found in 1989-90 and 1990-91 at 34 and 42 fawns/100 does respectively. Prior to those years fawn production was much higher averaging 72 fawns/100 does between 1986-87 and 1988-89.

The Mt. Dutton unit is a limited entry elk unit. Harvests have averaged 41 bulls between 1991 and 1995. Antlerless permits have been issued during each season with the exception of 1992. A high of 207 antlerless permits were issued in 1995. Elk calf production has improved since the severe winter of 1991-92 when only 20 calves/100 cows were estimated. In 1994-95, that ratio increased to 52 calves/100 cows.

# Study Site Description

A total of 11 trend study sites were established on the unit in 1987. These sites were reread in 1991 and 1997. Study sites monitor important winter, spring/winter and summer range for elk and deer. Seven of the 11 study areas occur on Forest Service land with two on BLM land and two on land administered by the DWR. A site description for each site follows along with data tables and a discussion of trends taking place.

#### **SUMMARY**

#### WILDLIFE MANAGEMENT UNIT - 24 - MT DUTTON

The overall trend for the herd unit is improved since 1991. The three low elevation winter range sites, North Pole Canyon (#1), Deer Creek Bench (#2), and North Bull Rush (#3) had downward trends in every category in 1991, currently only North Pole Canyon shows stable to upward trends in all categories. Cow Creek (#7), Prospect seeding (#8), and Barnhurst Ridge (#10), higher elevation winter range sites also showed downward trends in all categories in 1991, now all have stable soil trends, yet all still have slightly downward trends for browse. Only Barnhurst Ridge (#10) has a downward trend for herbaceous species. One common factor on more than half of the sites in the unit is a poor herbaceous understory, especially for forbs. Many sites have very few forbs which are important spring forage for wildlife. A trend summary table follows.

| Site                      | 1991 |        |                 | 1997 |        |                 |
|---------------------------|------|--------|-----------------|------|--------|-----------------|
|                           | Soil | Browse | Grasses & Forbs | Soil | Browse | Grasses & forbs |
| 24-1 North Pole Canyon    | 0    | -      | -               | 0    | +      | 0               |
| 24-2 Deer Creek Bench     | -    | -      | -               | +    | 0/-    | +               |
| 24-3 North Bull Rush      | -    | -      | -               | 0    | -      | 0               |
| 24-4 Mud Springs Chaining | -    | +      | 0               | 0    | 0      | 0               |
| 24-5 Suicide              | -    | +      | +               | 0    | +      | -               |
| 24-6 Table Mountain       | +    | +      | +               | 0    | +      | 0               |
| 24-7 Cow Creek            | -    | -      | -               | 0    | 1      | 0               |
| 24-8 Prospect Seeding     | 0    | -      | -               | 0    | 1      | +               |
| 24-9 Mud Spring           | -    | +      | 0               | 0    | -      | 0               |
| 24-10 Barnhurst Ridge     | -    | -      | 0               | 0    | -      | _               |
| 24-12 Marshall Basin      | -    | 0      | 0               | 0    | +      | 0               |

<sup>(+)</sup> = upward trend, (-) = downward trend, (0) = stable trend, (NR) = not read